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SECOND BI-MONTHLY PROGRESS REPORT
UNIVERSITY OF ALASKA

ERTS PROJECT 110-5
November 30, 1972

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A. TITLE OF INVESTIGATION:

Fillas N72 3v383

Break-up Characteristics of Chena River Basin

B. PRINCIPAL INVESTIGATOR/GSFC ID: U 596

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C. PROBLEMS IMPEDING INVESTIGATION:

It appears at this time that we will not be able to
analyze representative snowmelt data with the imagery
provided for the fall season. However, we will continue
to examine the ERTS imagery either on the test sites or
the other areas in Alaska.

D. PROGRESS REPORT:

1. Accomplishments during reporting period:

We have continued to contact the cooperative agencies
and are obtaining meteorological measurements with
ground truth data.
These agencies are:

- | | |
|---|-----------|
| 1) University of Alaska | |
| Experimental Station | T, Sd, Sq |
| Goldstream | T, Sd |
| Ester Dome | T |
| 2) National Weather Service | |
| International Airport | T, Sd, Sq |
| 3) Soil Conservation Service | |
| Several Locations | T, Sd, Sq |
| 4) NASA | |
| Gilmore Creek | T |
| 5) U.S.A. - CRREL | |
| Fox | T |
| 6) U.S.A. - Ft. Wainwright | T |
| 7) Alaskan Inter-Agency Technical Committee | |
| Caribou-Poker Creek Watershed | |
| Several Station | T, Sd, Sq |

T - Temperature

Sd - Snow Depth

Sq - Snow Quality

N73-14333

Unclas
G3/13 00345

(E72-10345) BREAK-UP CHARACTERISTICS OF
CHENA RIVER BASIN Bimonthly Progress
Report R.F. Carlson (Alaska Univ.,
College.) 30 Nov. 1972 3 p CSCL 08H

2. Plans for next reporting period:

Project personnel will continue to examine the ERTS data provided for the two test areas, both to see whether a melt pattern can be distinguished and to obtain background information for the spring investigation period.

E. SIGNIFICANT RESULTS:

See attached page.

F. PUBLICATIONS:

No publications during reporting period.

G. RECOMMENDATIONS:

None.

H. CHANGES IN STANDING ORDER FORMS:

None.

I. ERTS IMAGE DESCRIPTORS FORMS:

We have examined the positive prints from the ERTS Image # 1103-20502-6. This scene is one of the few non-cloudy scenes available for the two test areas. However, because of the uniform non-melting snowcover on the ground on this date and the severe shadowing effects from the low sun angle, it appears that the imagery will not be very useful for the purposes of this investigation.

J. DATA REQUEST FORMS:

None.

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River Basin

DISCIPLINE: Hydrology

SUMMARY OF SIGNIFICANT RESULTS:

A number of ERTS data scenes were received and analyzed on a preliminary basis. Most scenes were either greatly restricted by cloud cover or were outside either of the study sites. The one clear scene of both study sites indicates a significant amount of snow cover. Because the emphasis of the project is to look at possible fall periods of melting snow, there is no significant scientific practical or operational results to report during this reporting period.

